

CLAIMS

5           1.- A device for cleaning up oil spills, designed as a complement for a ship for cleaning up the crude, characterized by being formed by a pair of arms (1) intended for being coupled to the side of the hull of a ship (2), at the waterline level, each one of these arms (1) incorporating a casing (8) with an almost semi-cylindrical configuration, open at the top which, at its front edge extends into a baffle (11) positioned downwards and forwards, so as to facilitate access of the floating crude into said casing, whereas it extends in the back in a containment partition (12) projecting upwardly and forwardly, with sufficient height so as to prevent the crude from rising above the arm, a screw (10) being housed in said casing (8-9), which screw, with its movement, causes the crude to move towards a collection tank (3) arranged on the inner end of the arm, the one connected to the hull (2) of the ship, from where said crude is aspirated towards the inside of the ship by conventional means.

10           2.- A device for cleaning up oil spills according to claim 1, characterized in that said tank (3) incorporates a robust hinge (4) on the top free edge of its side wall (6) for being fitted to the ship (2), hingedly connecting it to a plate (5) assembled with the ability to move vertically by means of suitable guides on the hull (2) of the ship.

15           3.- A device for cleaning up oil spills according to claim 1, characterized in that the casing (8) is obtained from a plurality of planar sheets (8) with longitudinal edges bent for joining them together, defining an almost semi-circumferential profile, these sheets (8), like the baffle (11) and containment partitions (12), being modular along the arm (1) and joined together with the collaboration of evenly distributed brackets or ties (13) duly fixed to the outer side thereof.

20           4.- A device for cleaning up oil spills according to claims 1 and 2, characterized in that the screw (10) is also

modular, the ends of the shaft (15) of each module also having means (16) for axial and tongue and groove coupling between modules, it having been provided that the brackets (13) that are opposite the connection points between modules of the shaft (15) have a front extension (17) ending in a sleeve (18) in which said shaft (15) acts.

5           5.- A device for cleaning up oil spills according to the previous claims, characterized in that each arm (1), which adopts a slightly forward inclined position so as to favor moving the crude towards the hull (2) of the ship, is aided by a plurality of floats (20) located between its brackets (13) at a lower level, and it further has another float (21) located on its free end.

10           15         6.- A device for cleaning up oil spills according to the previous claims, characterized in that each arm (1) coupled to the corresponding side of the hull (2) of the ship in the mid area thereof, is connected to said hull through at least one tie or cable (23) guided from the free end of the arm (1) to the hull (2), substantially absorbing the stresses to which said arm (1) will be subjected, it having been provided that a series of intermediate cables (23') evenly distributed along the arm (1) participate with said end cable (23).

20           25         7.- A device for cleaning up oil spills according to claims 1 and 2, characterized in that each collection tank (3) incorporates two compartments differentiated by an intermediate partition (24), where the pumps (25) for lifting the collected wastes and the pumps for emptying the water that may have been carried to the tank are located, the motor (26) for operating the screw (10) of the corresponding arm (1) also being located in said tank (3).

30           35         8.- A device for cleaning up oil spills according to claims 1, 2 and 7, characterized in that each plate (5) on which each collection tank (3) and its corresponding arm (1) is assembled in a swiveling manner, incorporates in the side areas of its back side or the side for being fitted to the

5        hull (2) of the ship, respective restricted opening grooves (27) of considerable width which are complementary with guides (28) integral with the hull of the ship, notably spaced and with a parallel and vertical arrangement, said guides (28) incorporating front and longitudinal malec projections that are complementary with said grooves (27) of the plate (5).